

# DESIGN AND CONSTRUCTION GUIDELINES AND STANDARDS

DIVISION 12 • FURNISHINGS

## 12 30 00 • CASEWORK

### SECTION INCLUDES

Kitchen Cabinets  
Countertops

### RELATED SECTIONS

06 10 00 Rough Carpentry  
06 20 00 Finish Carpentry  
09 25 00 Gypsum Drywall  
09 65 00 Resilient Flooring  
22 00 00 Plumbing  
26 00 00 Electrical

### TECHNICAL STANDARDS

ANSI/KCMA A161.1 2000 Performance & Construction Stds. For Kitchen Cabinets- the industry recognized standard for residential cabinet construction.

HUD – Severe Use Specifications for Public and Indian Housing – Sept. 1993

AWI – American Woodwork Institute- materials and finish grades

ANSI161.2 1979 Performance Standards for High Pressure Decorative Laminate Countertops

NSF/ANSI 51 Performance Std. For Solid Surface Products in Food Service

UL 723,(ASTM E84) Fire Resistance Ratings for Solid Surface Materials

### MATERIAL

### CABINETS

The following cabinet specifications are recommended:

- ☐ 3/4 inch kiln-dried hardwood frames, doors, and drawer fronts
- ☐ frameless cabinets are not recommended in high stress environment
- ☐ panel doors should be 3/4" stile and rail frames with minimum 1/4" hardwood plywood panel.
- ☐ 1/2" plywood back panels and bottoms
- ☐ Particle board should not be used in any part of cabinets
- ☐ drawers should have 1/4" inch minimum plywood bottoms dadoed and glued into all four sides of drawer box.
- ☐ stapled connections are **not acceptable**
- ☐ dove-tailed drawer fronts preferred

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- ☐ Epoxy-coated steel drawer guides; 150lb. min. capacity typical for elderly and 150 lb. minimum capacity for family and special needs housing; two side-mounted slides per drawer.

A single center drawer guide is **not acceptable**

- ☐ 1/2 inch minimum plywood shelves, edge-banded with 1/4" solid wood
- ☐ Wall cabinet hanging rails should run continuously along top and bottom of cabinet and be minimum 3/4"x 3" nominal solid wood
- ☐ Base cabinet nailing rail shall be minimum 3/4" x 7 1/4" solid wood.
- ☐ Absolutely no finger joints in any of the wood components

Hardware must be high quality, such as manufactured by Blum, Stanley and Salice, and use heavy gauge metal and be easy to replace. For this reason, traditional style cabinets are preferred; door should have surface-mounted 170 degree hinges only. Concealed hinges should be 110 degree minimum at most locations and 165 degree minimum opening at Lazy Susans. The Designer should note that concealed hinges are more difficult to replace and should specify those which allow adjustability and are rated for heavy duty use.

All pull-out work surfaces and drawers must have positive lever stops, which have less of a tendency to jump the tracks when the drawer is fully extended.

### DESIGN

In barrier free and elderly units, drawer and door pulls should be ergonomically designed to permit doors and drawers to be opened with a closed fist.

Consult MAAB regulations for dimensional requirements at accessible kitchens and counters unless specific information about the needs of an incoming resident is known.

Specify Lazy Susans (carousels) with a tray below carousel designed to prevent misalignment when carousel is bumped..

Designers should consider specifying cabinets manufactured within a 500 mile radius, where possible, for reduced transportation costs and environmental benefits from local manufacture.

Cabinet finishes should be catalyzed vinyl, polyurethane, or polyester; laminate finishes are not permitted.

AWI Standard Finishing Systems which are acceptable include:

- ☐ TR-5 Catalyzed Vinyl-durable and resistant to chemicals.
- ☐ TR-6-Catalyzed Polyurethane- more durable and harder than TR-5
- ☐ TR-7. Polyester-hardest finish-may crack if impacted or if wood expands; difficult to repair..

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### COUNTERTOPS

All exposed edges of plastic laminate countertops must be laminated. one-piece, post-formed counters are preferred, although countertops with a separate 4 inch high backsplash mounted to the countertop with silicone sealant are acceptable.

Caulk at the backsplash and wall.

Miter all inside corners.

Seal cut edge of plywood at sink cut-out with spar varnish or exterior polyurethane.

If plastic laminate is used above the backsplash to the underside of cabinets, it must be of a durable thickness, installed with trim around the exposed edge, and caulked. Plastic laminate is not fireproof and Designer should consider other easily cleaned, durable materials such as stainless steel and porcelain tile for side walls next to stove and walls behind stove. Where plastic laminate is specified it should be carefully detailed around sources of heat.

The three most common grades of plastic laminate are:

- ☐ **HGS-** generally used for countertops- although it can be used in vertical applications.
- ☐ **VGP-** for vertical applications- less impact resistant than HGS
- ☐ **HGP-**for postformed and vertical cabinet interiors -thickness of .039" or less

ANSI/NEMA LD3-2000 Standards should be used to specify: thickness, performance properties and appearance of plastic laminate. A variety of thicknesses up to one inch thick are available, as well as fire-rated and chemical resistant decorative laminates

Designers specifying Corian or other plastic solid surface counters should carefully design details and layouts to avoid thermal expansion and stress cracks at areas such as sink cutouts and sources of heat such as stoves and dishwashers.

### DESIGN

For barrier free units, coordinate the location of electrical outlets, trim, etc. so that they will not be in the way if the countertop is readjusted in height.

Specify integral sink counter tops in this section.

Drop-in and wall hung sinks are supplied by the plumber.